Call for Papers

Workshop on Communication Architecture for Clusters (CAC 2006)

To be held in conjunction with the
20th IEEE Int'l Parallel and Distributed Processing Symposium (IPDPS 2006)
Rhodes Island, Greece,   April 25–29, 2006

THEME   Many of the world's fastest computer systems are PC or workstation clusters. Numerous research groups in academia, industry, and government are currently engaged in cluster research, seeking new ways to advance the state of the art of cluster communication. The goal of the CAC workshop is to bring together researchers and practitioners working in the areas of communication hardware and software to discuss their latest findings as well as future trends in the design of scalable, high-performance, and cost-effective communication architectures for clusters.

TOPICS OF INTEREST   Topics of interest for the workshop include but are not limited to the following: ① novel network-interface and switch architectures for supporting efficient point-to-point and collective communication, ② design, implementation, and optimization of low-level communication protocols (e.g., VAPI, Tports, GM, and IP) and higher-level communication layers (e.g., MPI, sockets, put/get, and distributed shared memory), ③ tools and techniques for evaluating cluster and application performance, and ④ communication and architectural issues related to router/switch organization, flow control, congestion control, routing and deadlock handling, load balancing, reliability, QoS support, topology discovery, and dynamic reconfiguration. Results of both theoretical and practical significance will be considered.

WORKSHOP CO-CHAIRS

Scott Pakin   (LANL)
Mazin Yousif   (Intel)

PROGRAM COMMITTEE

Angelos Bilas   (Crete)
Ron Brightwell   (SNL)
Darius Buntinas   (ANL)
Wu-Chun Feng   (LANL)
José Flich   (UPV)
Mitchell Gusat   (IBM)
Ben Lee   (OSU)
Olav Lysne   (Oslo)
Jarek Nieplocha   (PNNL)
Greg Pfister   (IBM)
Timothy Pinkston   (USC)
Vikram Saletore   (Intel)
Cris Simpson   (Intel)
Evan Speight   (IBM)
Pete Wyckoff   (OSC)

PROCEEDINGS   The proceedings of this workshop will be published together with the proceedings of other IPDPS 2006 workshops by the IEEE Computer Society Press.

PAPER SUBMISSIONS   Submitted manuscripts may not exceed eight single-spaced pages using a 12-point font on 8½ × 11-inch pages, everything included (figures, tables, references, etc.) Hardcopy submissions will be accepted, but files in either PostScript (level 2) or PDF format are strongly encouraged. Authors need to make sure that the electronically submitted files are formatted for 8½ × 11-inch paper. Submissions will be judged on correctness, originality, technical strength, significance, quality of presentation, and interest and relevance to the workshop attendees. Submitted papers may not have appeared in or be under consideration for another workshop, conference, or journal.

IMPORTANT DATES

Paper submission: 10 October   2005
PC reviews due: 28 November   2005
Notification of acceptance: 12 December   2005
Camera-ready due: 21 January   2006

ADDITIONAL INFORMATION   For more information on CAC 2006 please visit the workshop Web site at `http://www.c3.lanl.gov/cac2006/` or send e-mail to `cac2006@c3.lanl.gov`.